

Amendment and Response
Applicant: Trudy L. Benjamin
Serial No.: 10/827,142
Filed: April 19, 2004
Docket No.: 200309559-1
Title: FLUID EJECTION DEVICE

REMARKS

The following remarks are made in response to the Office Action mailed July 17, 2007. Claims 23-34 and 58-63 were rejected. Claims 23-34 and 58-63 remain pending in the application and are presented for reconsideration and allowance.

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 23-25 and 58 under 35 U.S.C. § 103(a) as being unpatentable over the Schloeman et al. patent et al. U.S. Patent No. 6,659,581 in view of the Wade et al. U.S. Patent No. 6,290,333.

The Examiner rejected claims 26, 59 and 60 under 35 U.S.C. § 103(a) as being unpatentable over the Schloeman et al. patent and the Wade et al. patent and further in view of the Kanematsu et al. U.S. Patent Publication No. 2002/0113832.

The Examiner rejected claims 27-34 and 61-63 under 35 U.S.C. § 103(a) as being unpatentable over the Schloeman et al. patent and the Wade et al. patent and further in view of the Bloomberg U.S. Patent Publication No. 2002/0097287.

The Schloeman et al. patent is directed to an inkjet printhead assembly that includes at least one inkjet printhead having nozzles and firing resistors. The inkjet printhead assembly includes fire pulse generator circuitry responsive to a start fire signal to generate fire signals, each having a series of fire pulses. The fire pulse generator circuitry generates the fire signals by controlling the initiation and duration of the fire pulses. The fire pulses control timing and activation of electrical current through the firing resistors to thereby control ejection of ink drops from the nozzles.

Applicant respectfully submits that the Schloeman et al. patent fails to teach or suggest an address generator, as recited in independent claim 23 and as recited in independent claim 58. In contrast, in the Schloeman et al. patent, the inkjet printhead assembly includes fire pulse generator circuitry responsive to a start fire signal to generate fire signals.

The Schloeman et al. patent also fails to teach or suggest an address generator including first bank circuitry configured to receive a first group of timing pulses from a series of timing pulses and generate a first sequence of address signals in response to the first group of timing pulses, as recited in independent claim 23, and an address generator including first bank circuitry configured to receive a first group of timing pulses and generate a first

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sequence of address signals in response to the first group of timing pulses, as recited in independent claim 58. In contrast, in the Schloeman et al. patent, the inkjet printhead assembly includes fire pulse generator circuitry responsive to a start fire signal to generate fire signals. The fire pulse generator circuitry generates the fire signals by controlling the initiation and duration of the fire pulses. Pulse width registers store pulse width values which are employed to determine the widths of the fire pulses (see the Schloeman, et al. patent at column 8, lines 18-22). Electronic controller 20 can access the pulse width registers via the data bus and the address bus, (see the Schloeman, et al. patent at column 8, line 51 through column 9, line 7).

The Schloeman et al. patent also fails to teach or suggest an address generator including second bank circuitry configured to receive a second group of timing pulses from the series of timing pulses and generate a second sequence of address signals in response to the second group of timing pulses, as recited in independent claim 23, and an address generator including second bank circuitry configured to receive a second group of timing pulses and generate a second sequence of address signals in response to the second group of timing pulses, as recited in independent claim 58. As described above, in contrast, in the Schloeman et al. patent, the inkjet printhead assembly includes fire pulse generator circuitry that generates fire signals. Pulse width registers store pulse width values which are employed to determine the widths of fire pulses.

In addition, the Schloeman et al. patent fails to teach or suggest that the first sequence of address signals is adapted to enable the first group of fluid ejection elements, as recited in independent claim 23 and as recited in a variant of the above in independent claim 58. The Schloeman et al. patent also fails to teach or suggest that the second sequence of address signals is adapted to enable the second group of fluid ejection elements, as recited in independent claim 23 and as recited in a variant of the above in independent claim 58. In contrast, in the Schloeman et al. patent, the fire pulses control timing and activation of electrical current through the firing resistors to thereby control ejection of ink drops from the nozzles.

In view of the above, Applicant submits that all features of independent claim 23 and all features of independent claim 58 are not taught or suggested by the Schloeman et al. patent or the Wade et al. patent, alone or in combination.

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As dependent claims 24-34 further define patentably distinct independent claim 23 and dependent claims 59-63 further define patentably distinct independent claim 58, these dependent claims are also believed to be allowable over the art of record. Therefore, Applicant respectfully requests that the above rejections under 35 U.S.C. § 103 be withdrawn and claims 23-34 and 58-63 be allowed.

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CONCLUSION

In view of the above, Applicant respectfully submits that pending claims 23-34 and 58-63 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 23-34 and 58-63 are respectfully requested.

No fees are required under 37 C.F.R. 1.16(h)(i). However, if such fees are required, the Patent Office is hereby authorized to charge Deposit Account No. 08-2025.

The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Any inquiry regarding this Amendment and Response should be directed to either Patrick G. Billig at Telephone No. (612) 573-2003, Facsimile No. (612) 573-2005 or Don Coulman at Telephone No. (541) 715-1694, Facsimile No. (541) 715-8581. In addition, all correspondence should continue to be directed to the following address:

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Respectfully submitted,

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